

What is claimed is:

- SUB A17
- 5 1. A method of configuring a directory server comprising a plurality of entries, the method comprising the steps of:
- creating a CoS scheme, wherein the CoS scheme comprises
- a CoS Definition entry; and
- one or more CoS template entries.
- 10 2. The method of claim 1, wherein the CoS Definition entry has a CoS specifier and a value for the CoS specifier.
3. The method of claim 2, wherein the value of the CoS specifier in the CoS Definition entry appears in a target entry as a first attribute type.
- 15 4. The method of claim 3, wherein the value of the first attribute type corresponds to a relative distinguishing name (RDN) of a template associated with the CoS Definition entry.
- 20 5. The method of claim 1, wherein the CoS definition entry contains a list of attribute types, the values for which may be provided by the CoS scheme in said one or more CoS template entries.
- 25 6. A method of providing an attribute-value pair stored in a directory system and shared by a plurality of target entries in the directory system, the method comprising the steps of:
- creating a classic CoS scheme;
- receiving a request for an attribute-value pair associated with a first target entry;

searching in a list of attribute-value pairs which are associated with template entries that are in turn associated with CoS Definition entries for instances of attribute-value pairs that match the requested attribute type, said searching step resulting in a matched list of attribute-value pairs;

5 applying at least one of a set of constraints to the matched list of attribute-value pairs; and

 returning the attribute-value pair that satisfied the applied constraint(s).

7. The method as in claim 6, wherein the set of constraints includes CoS scope.

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8. The method as in claim 6, wherein the set of constraints includes determining if a cos specifier associated with the matched attribute-value pair matches a cos definition entry associated with the attribute-value pair.

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9. The method as in claim 6, wherein the set of constraints includes determining if a matched attribute-value pair corresponds to the RDN of a template associated with the CoS definition entry.

10. An apparatus comprising:

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a directory server comprising:

 a component to configure and store a plurality of target entries; and

 a component to create a CoS scheme, wherein the CoS scheme comprises

 a CoS Definition entry; and

 one or more CoS template entries.

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11. The apparatus of claim 10, wherein the CoS Definition entry has a CoS specifier and a value for the CoS specifier.

12. The apparatus of claim 11, wherein the value of the CoS specifier in the CoS Definition entry appears in a target entry as a first attribute type.

13. The apparatus of claim 12, wherein the value of the first attribute type
5 corresponds to a relative distinguishing name (RDN) of a template associated with the CoS Definition entry.

14. The apparatus of claim 10, wherein the CoS definition entry contains a list of attribute types, the values for which may be provided by the CoS scheme in said one or
10 more CoS template entries.

15. An apparatus comprising:

a directory server comprising:

a component configured to store a plurality of target entries;

15 a component adapted to configure an attribute-value pair that could be shared by at least a subset of the plurality of target entries;

a component configured to receive a request for an attribute-value pair associated with a first target entry;

20 a component configured to search in a list of attribute-value pairs which are associated with template entries that are in turn associated with CoS Definition entries for instances of attribute-value pairs that match the requested attribute type, said searching step resulting in a matched list of attribute-value pairs;

a component configured to apply at least one of a set of constraints to the matched list of attribute-value pairs to result in a selected attribute-value pair; and

25 a component configured to return the selected attribute-value pair.

16. The apparatus as in claim 15, wherein the set of constraints includes CoS scope.

17. The apparatus as in claim 15, wherein the set of constraints includes determining if a cos specifier associated with the matched attribute-value pair matches a cos definition entry associated with the attribute-value pair.
- 5 18. The apparatus as in claim 15, wherein the set of constraints includes determining if a matched attribute-value pair corresponds to the RDN of a template associated with the CoS definition entry.